REMARKS

This Reply is responsive to the non-final Office Action¹ of March 29, 2005. Claims 1-32 were presented for examination and were rejected. No claims are added or canceled; claims 1-32 are pending. Claims 1, 12, 19, 24, 25, 27 and 32 are amended. No new matter is added. Claims 1, 12, 19, 24 and 32 are independent claims.

Preliminarily, the specification was amended to correct for minor typographical errors found in several paragraphs. Also, a Glossary of Acronyms is proposed to be included at the beginning of the specification to enhance clarity of presentation. These acronyms were previously used in the specification and were either previously defined in the specification or have standard definitions in this art. Thus, no new matter is added.

Claims 19-26, 30 and 31 are rejected under 35 U.S.C. §102(e) as being anticipated by Aura, U.S. Patent. No. 6,711,400 B1 (referred to hereinafter as "Aura"). Claims 1-18 and 24-30 under 35 U.S.C. §103(a) as being un-patentable over Aura in view of Marshall et al., U.S. Patent. No. 4,888,800 (referred to hereinafter as "Marshall"). Claim 32 is rejected under 35 U.S.C. §103(a) as being un-patentable over Aura in view of Marshall et al., and further in view of Maupin, U.S. Patent Ser. No. 6,600,917 B1 (referred to hereinafter as "Maupin"). Applicant respectfully traverses these rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) because Applicant's currently amended claims are not disclosed or suggested by any one or all of these references taken in combination for the following reasons. Consider, e.g., currently amended claim 1:

A method for use in authenticating a service network to a station, the station having a home environment network, the method comprising: storing a

¹ The Office Action may contain a number of statements characterizing the cited reference(s) and/or the claims which Applicant(s) may not expressly identify herein. Regardless of whether or not any such statement is identified herein, Applicant(s) does not automatically subscribe to, or acquiesce in, any such statement. Further, silence with regard to rejection of a dependent claim, when such claim depends, directly or indirectly, from an independent claim which Applicant(s) deems allowable for reasons provided herein, is not acquiescence to such rejection of that dependent claim, but is recognition by Applicant(s) that such previously lodged rejection is moot based on remarks and/or amendments presented herein relative to that independent claim.

key at the service network; <u>transmitting information to the station from the service network</u> that enables the station to compute the key stored at the service network; receiving a request for service at the service network from the station; adjusting a verification value at each usage of the key; and <u>transmitting, from the service network to the station</u>, information corresponding to the verification value that forms a part of a verification computation enabling the station to authenticate the service network.

As recited in claim 1, a method for authenticating a service network to a station (mobile terminal) comprises, *interalia*, *transmitting* information from the service network to the station. Clearly, the term "transmitting", in the context of cellular telecommunication technology in which this application is based, relates to electronic, computerized, wireless (electromagnetic) transmission of information - and cannot mean a physical delivery of an object by courier or other transportation means. (See, for example, Applicant's specification, page 2, lines 3-13.)

Claim 1 is rejected under 35 U.S.C. §103(a) as being un-patentable over Aura in view of Marshall. On page 10 of the Office Action the Examiner admits that Aura does not disclose adjusting a verification value at each usage of the key and admits that Aura does not disclose transmitting information corresponding to the verification value to the station. Applicant agrees.

The Office Action continues on page 10:

"Marshall discloses the use of a counter in association with the usage of an encryption key by a terminal (corresponding to the recited mobile station). When the counter reaches a predetermined value a new key is <u>transported</u> to the terminal that corresponds to the recited transmitting information corresponding to the verification value to the station (see for example, abstract: col. 7, lines 15-25)." (Emphasis added.)

Applicant respectfully submits that "transporting" and "transmitting" are two very different and distinct concepts and activities, where transporting (e.g., via private courier, trucking, railway, airlines) does not at all suggest transmitting (e.g., via wireless transmission).

According to the Office Action, the Examiner views Marshall in the following manner: (1) the terminal(s) in Marshall corresponds to Applicant's mobile station(s) MS 130 as was expressed in the above quotation, and (2) Marshall's key distribution center KDC is roughly equivalent to Applicant's service network SN 120 as stated in the Office Action, page 3: "In Marshall system, KDC performs like a terminal located in a service network (see Fig. 1)." Based on this mapping of components disclosed in Marshall against elements of Applicant's claim 1, the Examiner reaches his conclusion that claim 1 is un-patentable over Aura in view of Marshall. Applicant respectfully disagrees with this conclusion for the following reasons.

If the terminals in Marshall correspond to Applicant's mobile stations, as the Examiner asserts, then any keys in Marshall that are being transferred between its terminals are irrelevant with respect to Applicant's claim 1, regardless of how they may be transferred, supplied, or communicated. These other keys are irrelevant at least because claim 1 does not recite keys being transferred between mobile stations.

Moreover, the Examiner focuses on the User Master Key (UMK) as being equivalent to the key recited in claim 1.

Indeed, as noted in the above-quoted portion of the Office Action, the Examiner refers to column 7, lines 15-25 of Marshall for support of his position. That section states, interalia, "The <u>UMK</u> for a UA [user agent or terminal] is <u>transported physically</u> in a key transport unit 31, which is connected temporarily to the secure module 16 of the UA to transfer the UMK into a UMK resistor [register] 32." (Emphasis added.) Thus, when a count is reached that indicates that the UMK should be changed, according to Marshall, another UMK must be <u>physically delivered</u> to a terminal for that to be accomplished.

There are various other sections of Marshall that further underscore the requirement of physical distribution of the UMK's. For example, column 6, lines 36-53 of Marshall says, *interalia*, that "the UMK's are distributed physically, and changes to them are difficult to achieve" and the "KDC therefore <u>only</u> becomes involved in key

changes involving the *physical transport* of keys" at relatively infrequent intervals (Emphasis added).

It is respectfully submitted that this description of key distribution in Marshall does NOT suggest at least "transmitting information to the station from the service network that enables the station to compute the key stored at the service network" as recited in claim 1 (Emphasis added). And, this description of key distribution in Marshall also does NOT suggest at least "transmitting, from the service network to the station, information corresponding to the verification value that forms a part of a verification computation enabling the station to authenticate the service network" as recited in claim 1.

In accordance with MPEP 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. And, all three of these basic criteria must be met - if any one is not met the prima facie case of obviousness is not made.

In this instance, the prior art references Aura and Marshall, do not teach or suggest all limitations of claim 1 for the reasons given above. Aura does not disclose or suggest adjusting a verification value at each usage of the key and does not disclose or suggest transmitting information corresponding to the verification value to the station, per the Examiner's admission. Marshall does not disclose or suggest transmitting information to the station from the service network that enables the station to compute the key stored at the service network and does not disclose or suggest transmitting, from the service network to the station, information corresponding to the verification value that forms a part of a verification computation enabling the station to authenticate the service

network, per the above analysis. Accordingly a prima facie case of obviousness has not been established against claim 1. The other two criteria need not be addressed at this point as they are mooted by the failure of the combined references to disclose or suggest all claim limitations.

It is respectfully submitted that the rejection of independent claim 1 be withdrawn and the claim allowed for reasons given above. Claims 2-11, dependent from claim 1, are likewise allowable, at least by reason of their dependency from an allowable base claim.

Independent claims 12, 19, 24 and 32 have each been amended to include the same or similar limitations recited above with respect to claim 1. Accordingly, they are allowable over Aura and Marshall for the same reasons as given above. For claim 32 which was rejected further in view of Maupin, it is noted that Maupin does not cure the deficiency noted in the combination of Aura and Marshall. Furthermore, all dependent claims, namely 13-18 dependent from independent claim 12, 20-23 dependent from independent claim 19, and 25-31 dependent from independent claim 24 are likewise allowable at least for reasons based on their dependencies from allowable independent base claims.

CONCLUSION

Reconsideration and allowance are respectfully requested based on the above amendments and remarks. It is respectfully submitted that all claims and, therefore, this application are in condition for allowance.

If there are any remaining issues or if the Examiner believes that a telephone conversation with Applicant's attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at (972) 718-4800.

To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to deposit account number 07-2347. Please charge any other fees due, or credit any overpayment made to that account.

Respectfully submitted,

Date: June 30, 2005

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